



International application No. PCT/JP03/08419

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|---|---|---|-----------------------|
| A. CLAS | SIFICATION OF SUBJECT MATTER C1 H01M4/86, H01M4/88, H01M8, | /02, H01M8/10 | |
| According t | to International Patent Classification (IPC) or to both ne | ational classification and IPC | |
| B. FIELD | S SEARCHED | | |
| Minimum d Int. | ocumentation searched (classification system followed C1 H01M4/86, H01M4/88, H01M8, | by classification symbols) /02, H01M8/10 | |
| Jits | tion searched other than minimum documentation to the ayo Shinan Koho 1922–1996 i Jitsuyo Shinan Koho 1971–2003 | Toroku Jitsuyo Shinan Koh | 0 1994–2003 |
| Electronic d | ata base consulted during the international search (nam | e of data base and, where practicable, sea | rch terms used) |
| C. DOCU | MENTS CONSIDERED TO BE RELEVANT | | |
| Category* | Citation of document, with indication, where ap | propriate, of the relevant passages | Relevant to claim No. |
| Y | JP 9-245800 A (Toyota Motor 19 September, 1997 (19.09.97) Full text (Family: none) | | 1-28 |
| Y | JP 2001-52717 A (Equos Resea 23 February, 2001 (23.02.01), Full text (Family: none) | | 1-28 |
| Y | JP 2001-338655 A (Sanyo Electron of December, 2001 (07.12.01), Full text & WO 01/93356 A1 & US & EP 1289036 A1 | | 1-28 |
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| × Furthe | er documents are listed in the continuation of Box C. | See patent family annex. | |
| date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed | | "Y" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family | |
| 07 October, 2003 (07.10.03) | | Date of mailing of the international search report 28 October, 2003 (28.10.03) | |
| Name and mailing address of the ISA/ Japanese Patent Office | | Authorized officer | |
| Facsimile No. | | Telephone No. | |





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| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
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| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | |
| Y | JP 2001-283873 A (Matsushita Electric Industrial Co., Ltd.), 12 October, 2001 (12.10.01), Claims; Par. No. [0087] & WO 01/67532 A1 & EP 1265303 A1 | 6-8,17-19, 24-26 | |
| A | JP 5-251086 A (Hitachi, Ltd.), 28 September, 1993 (28.09.93), & EP 560295 A1 & US 5500292 A | 1-28 | |
| A | JP 2002-141071 A (Matsushita Electric Industrial Co., Ltd.), 17 May, 2002 (17.05.02), & WO 02/37586 A1 & US 2002/192539 A1 & EP 1336999 A1 | 1-28 | |
| A | JP 11-135132 A (Toshiba Corp.), 21 May, 1999 (21.05.99), (Family: none) | 1-28 | |
| P,A | JP 2003-59498 A (Equos Research Co., Ltd.), 28 February, 2003 (28.02.03), (Family: none) | 1-28 | |
| P,A | JP 2002-298859 A (Nippon Soken, Inc.), 11 October, 2002 (11.10.02), (Family: none) | 1-28 | |
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